cavities canal-like and elongated, penetrating the entire stock and found both in the twigs and stems. Only four of the septa enter into the elongated gastral cavities, namely those which bear the sexual organs and the long, narrow, mesenterial ridges. Sexual products contained within the elongated gastral tubes of the smallest branches."

"Genus *Siphonogorgia*, Kölliker, with much connective tissue in the sarcosoma, especially around the gastral tubes. Polyp calyces with slightly developed calicular opercula."

Siphonogorgia mirabilis, described by Klunzinger (*loc. cit.*) from the Red Sea, exhibits still more markedly the habit of the Gorgonidæ, but *Siphonogorgia squarrosa*, Kölliker and Studer, while retaining the essential characters of the genus, strongly recalls the Nephthyidæ. The canal-system is analogous, as is also the system of narrow nutrient canals ramifying between the polyp tubes. The relationship with the Nephthyidæ is still more easily effected through the new genus *Chironephthya*, so that it appears proper to give up the isolated subfamily of the Siphonogorgiaceæ, and to place the genus under the family of the Nephthyidæ. The diagnosis of Kölliker's subfamily then remains as the diagnosis of the genus; the subfamily Siphonogorginæ here created being understood in a much wider sense.

Siphonogorgia godeffroyi, Kölliker.

A specimen found only in fragments, which appear to belong to a young colony, may be referred to this species, so thoroughly described by Kölliker. It consists of a main stem from whose upper portion short branches come off on all sides. The barren portion forms half of the stem. The branches are covered with small, appressed polyp-calyces, within which the tentacles are sunk. In that the branches and twigs are still very short, and the greater portion of the same is occupied by polyps, the habit of the colony differs somewhat from that of the specimen described by Kölliker. But since the finer structure, spicules, canal-system, colour, &c., agree, we may refer the present specimen to the same species.

Habitat.—Station 232, *Hyalonema*-ground, Japan; depth, 345 fathoms.

Siphonogorgia köllikeri, n. sp. (Pl. XXIV. fig. 2).

An upright, ramified colony, whose main stem gives off short, blunt branches on two sides at angles of about 80 degrees. These branches are not further ramified, and they bear at the end a group of two or three polyps. Polyps also occur arranged spirally on the stem and branches. The polyps are placed obliquely to their support, the mouth being directed towards the end of the branches. They possess a tentacular operculum composed of spicules. The stem and branches are somewhat flattened in the plane of